Nov. 3, 2021 (Wed.)		
19:00-20:30	**Welcome Reception**	
Nov. 4, 2021 (Thu.)		
	Room Monterosso, B1F *Session Chair: Name (Affiliation/ Korea)*	*Room Forum 1, 3F* *Session Chair: Name (Affiliation/ Korea)*
	A1. Automotive Electronics and High Power Package	**B1. Sensor**
08:30-08:55	**O1-1 Ultrafast Sinter-Bonding Technique in Air Using Size-Controllable Cu Dendritic Particles** Dr. Eun Byeol Choi, Prof. Jong-Hyun Lee (Seoul National University of Science and Technology/ Korea)	**O1-2 Manganese and Nitrogen Doped Graphene Oxide-Based Hybrid Composite Materials for DMMP Detection** Mr. Sanjeeb Lama, Dr. Sivalingam Ramesh*, Dr. Young-Jun Lee, Mr. Bong-Gyu Bae, Mr. Jae-Hong Kim, Prof. Joo-Hyung Kim (Dongguk University*, Inha University/ Korea)
08:55-09:20	**O1-3 WLCSP for High Power Density Converter Applications** Dr. Jae-sung Lim (HANA Micron Inc./ Korea)	**O1-4 Mesoporous Pd@Au Film Integrated with Blood Plasma Separation Membrane for Surface-Enhanced Raman Scattering (SERS) Biosensor** Dr. Hyun-Jong Kim, Ms. Hana Lim, Dr. Young Min Park, Dr. Ho-Nyun Lee (KITECH/ Korea)
09:20-09:45	**(Invited) I1-1 Sintered Silver as Die Attach Materials** Dr. Siow Kim Shyong (Universiti Kebangsaan Malaysia/ Malaysia)	**(Invited) I1-2 Flexible Pressure Sensor Based on 3D Structure and its Application** Dr. Hanchul Cho (KITECH/ Korea)
09:45-10:10	**(Invited) I1-3 Power Semiconductor Packaging Approaches for Reliable Power Module Systems** Prof. Sang Won Yoon (Hanyang University/ Korea)	**(Invited) I1-4 Ultra-Wide Bandgap Ga2O3-Based Solar-Blind Photodetectors** Prof. Jihyun Kim (Korea University/ Korea)
10:10-10:35	**(Invited) I1-5 Complete EMI Shielding Leadless Package Solution in Automotive** Sir. HyeongIl Jeon (Amkor Technology Korea/ Korea)	**(Invited) I1-6 TBD** Prof. Il Kwon Oh (KAIST/ Korea)
10:35-10:55	***Coffee break***	
	Room Monterosso, B1F *Session Chair: Name (Affiliation/ Korea)*	
10:55-11:05	**Opening Remark**	
11:05-11:35	**Keynote Talk 1 Warpage after Molding Processes: Can we Really Predict This?** Prof. Bongtae Han (University of Maryland/ USA)	
11:35-12:05	**Keynote Talk 2 TBD** Dr. Santosh Kumar (Yole Dévelopement/ France)	
12:05-13:20	***Lunch***	
	Room Monterosso, B1F *Session Chair: Name (Affiliation/ Korea)*	
13:20-13:50	**Plenary Talk 1 TBD** Dr. Yun Tae Lee (Samsung Electro-Mechanics Co., Ltd./ Korea)	
13:50-14:20	**Plenary Talk 2 TBD** Prof. Joungho Kim (Korea Advanced Institute of Science and Technology/ Korea)	
14:20-14:40	***Coffee break***	
	Room Forum 2 & Forum 3, 3F *Session Chair: Name (Affiliation/ Korea)*	
14:40-15:20	**Poster Presentation Session**	
	Room Monterosso, B1F *Session Chair: Name (Affiliation/ Korea)*	*Room Forum 1, 3F* *Session Chair: Name (Affiliation/ Korea)*
	A2. Special Session for Honor Retirement of Professor Kyung W. Paik	**B2. Microelectronics & Packaging Materials 1**
15:20-15:45	**(Invited) I1-7 Electroceuticals: The Future of Miniaturized Medical Devices** Dr. Kiwon Lee (Ybrain Inc./ Korea)	**(Invited) I1-8 Thermal Management at Nanoscale in Electronics Packaging** Prof. Hyejin Jang (Seoul National University/ Korea)
15:45-16:10	**(Invited) I1-9 Development of SmartPlateTM Series: Superb Copper Electroplating Solution for Overcoming Process Limitations of Micro-Bump** Dr. Min Hyung Lee (KITECH/ Korea)	**(Invited) I1-10 Transient Packaging Strategies for Biodegradable Electronics** Prof. Seung-Kyun Kang (Seoul National University/ Korea)

16:10-16:35	**(Invited) I1-11 Packaging Trend & FOWLP Development** Dr. Kim Hyoung Joon (Qualcomm Technologies, Inc./ Korea)	**(Invited) I1-12 Achieving Crack-Free Metallized Through-Glass Via Substrate for Reliable High Frequency Microelectronic Packages** Dr. Chukwudi Okoro (Corning Incorporated/ USA)
16:35-17:00	**(Invited) I1-13 Interconnect Challenges in Memory Packaging** Dr. Ho-Young Son (SK hynix Inc./ Korea)	**(Invited) I1-14 TBD** Dr. Sangmok Lee (CNNT/ Korea)
17:00-17:25	**(Invited) I1-15 Effects of Magnetic Field on the Dispersion of Conductive Particles in Anchoring Polymer Layer (APL) Anisotropic Conductive Films (ACFs) for Ultra-Fine Pitch Interconnection** Dr. DalJin Yoon (SK hynix Inc./ Korea)	**O1-5 Novel Synthesis of Highly Periodic Mesoporous Organosilicas SMS-1 & SMS-2 and Application for Various Electronic Materials** Dr. Md Kamal Hossain (Bangladesh Council of Scientific and Industrial Research/ Bangladesh)
	Room Monterosso, B1F ***Session Chair: Name (Affiliation/ Korea)***	
17:25-17:40	***Retirement Ceremony of Professor Kyung W. Paik***	
17:40~	***Dinner (Blue Seagull, 2F)***	***General Meeting (Room Monterosso, B1F)***
	Nov. 5, 2021 (Fri.)	
	Room Monterosso, B1F ***Session Chair: Name (Affiliation/ Korea)***	***Room Forum 1, 3F*** ***Session Chair: Name (Affiliation/ Korea)***
	C1. Heterogeneous Integration Roadmap (HIR) Workshop 1	**D1. Flexible/ Wearable Electronics 1**
08:30-08:55	**(Invited) I2-1 HIR workshop-International: HIR Overview** Dr. William Chen (ASE Technology Holding, Co., Ltd./ USA) Dr. W. R. "Bill" Bottoms (Third Millennium Test Solutions Inc.(3MTS)/ USA)	**(Invited) I2-6 Intelligent Soft Bioelectronics for Advancing Human Healthcare** Prof. W. Hong Yeo (Georgia Tech/ USA)
08:55-09:20	**(Invited) I2-3 HIR workshop-International: 5G Communication** Sir. Timothy Lee (IEEE/ USA)	**(Invited) I2-4 Soft Electronics for Mobile Health and Human-Centered Robotics** Prof. Nanshu Lu (University of Texas Austin/ USA)
09:20-09:45	**(Invited) I2-5 HIR workshop-International: Automotive Electronics** Sir. Rich Rice (ASE Technology Holding, Co., Ltd./ USA)	**(Invited) I2-6 Sensors and Medical Devices Based on Textiles and Elastomers** Prof. Hyun-Joong Chung (University of Alberta/ Canada)
09:45-10:10	**(Invited) I2-7 HIR workshop-International: Co-Design** Prof. Jose E Schutt-Aine (University OF Illinois Urbana-Champaign/ USA)	**(Invited) I2-8 Printing and Water Sintering Techniques for High Performance Transient Electronic Circuits** Prof. Xian Huang (Tianjin university/ China)
10:10-10:30	***Coffee break***	
	Room Monterosso, B1F ***Session Chair: Name (Affiliation/ Korea)***	***Room Forum 1, 3F*** ***Session Chair: Name (Affiliation/ Korea)***
	C2. Heterogeneous Integration Roadmap (HIR) Workshop 2	**D2. Flexible/ Wearable Electronics 2**
10:30-10:55	**(Invited) I2-9 Substrate Roadmap for Heterogenous Integration** Dr. Kyuoh Lee (Intel Corporation/ USA)	**(Invited) I2-10 Flexible and Printed 3D Organic Circuits and Active-Matrix Sensor Arrays** Prof. Sungjune Jung (POSTECH/ Korea)
10:55-11:20	**(Invited) I2-11 CUBE and ISC Technologies for 2.5D and 3D Heterogeneous Integration** Dr. Max Min (Samsung Foundry, USA)	**(Invited) I2-12 High-Resolution 3D Printing of Stretchable Interconnections for Wearable Electronics** Prof. Jang-Ung Park (Yonsei University/ Korea)
11:20-11:45	**(Invited) I2-13 Heterogeneous 2.5D Integration Packaging Technology** Sir. PilJe Sung (Amkor Technology Korea/ Korea)	**(Invited) I2-14 Skin-Integrated Wireless Haptic Interface for VR and AR** Porf. Yei-Hwan Jung (Hanyang University/ Korea)
11:45-12:10	**(Invited) I2-15 Highly-integration Packaging Technologies for Various Applications** Sir. Insoo Kang (NEPES Corporation/ Korea)	**O2-1 Effect of cyclic Frequency on Bending Fatigue in Copper Film on Flexible Substrate** Mr. Lee Jong-Sung, Dr. Young-Joo Lee*, Prof. Byoung-Joon Kim**, Prof. Young-Chang Joo (Seoul National University, Korea Polytechnic University**/ Korea, University of Pennsylvania*/ USA)
12:10-13:30	***Lunch***	
	Room Monterosso, B1F ***Session Chair: Name (Affiliation/ Korea)***	***Room Forum 1, 3F*** ***Session Chair: Name (Affiliation/ Korea)***
	C3. Packaging Processing & Equipment	**D3. PCB, Solder and Reliability**
13:30-13:55	**(Invited) I2-16 TBD** Dr. Dong-Yeon Kim (Hana Micron Inc./ Korea)	**(Invited) I2-17 How to Apply Selective Electrochemical 3D Printer to the Additive Process of Thermal Resistant Bonding Materials for High-Power Semiconductors in the PCB Mass Production?** Dr. Sung-Bin Kim (AnyCasting Co., Ltd./ Korea)

13:55-14:20	(Invited) I2-18 **The Future of Memory Package Technology** Dr. Heejin Lee (SK hynix Inc./ Korea)	(Invited) I2-19 **Effects of Co on the Morphology, Shear Strength and Fracture of the Low Temperature SAC305/Sn-58Bi/Cu Composite Solder Joint** Prof. Shuye Zhang (Harbin Institute of Technology/ China)
14:20-14:45	(Invited) I2-20 **Proposal of Micro UF(Underfill) & SBA (Solder ball attach) for Advanced Package** Sir. Jun Sang Park (Protec Co., Ltd./ Korea)	O2-2 **Study of Bismuth and Indium rich Bismuth Indium Tin Alloy for Solder Paste** Mr. Sungryul Mang, Mr. Hoon Choi, Prof. Hoojeong Lee (Sungkyunkwan University/ Korea)
14:45-15:10	(Invited) I2-21 **TBD** Sir. SeongJin Park (ASM Pacific/ Korea)	O2-3 **2-Layer Rt-QFN : a New Coreless Substrate Based on Lead-Frame Technology** Dr. In Seob Bae, Mr. Hong Chan Kim, Mr. Ho Jun Ryu, Mr. Sung Il Kang (HaesungDS/ Korea)
15:10-15:35	O2-4 **Effects of N2 Plasma Treatment Condition on the Interfacial Adhesion Energy of Polybenzoxazole/Cu layer for Cu RDL Applications of FOWLP** Ms. Gahui Kim, Mr. Doheon Kim, Prof. Young-Bae Park (Andong National University/ Korea)	O2-5 **Investigation on the Mechanical Reliability of TiN / SiO2 for W Nucleation Processes** Mr. Sun Woo Lee*, Mr. Dong Jun Kim*, Dr. Jinho Jeon, Dr. WonJun Yun, Dr. Tae-Sung Kim, Prof. Taek-Soo Kim* (WONIK IPS CO., Ltd., KAIST*/ Korea)
15:35-15:55	***Coffee break***	
	Room Monterosso, B1F ***Session Chair: Name (Affiliation/ Korea)***	***Room Forum 1, 3F*** ***Session Chair: Name (Affiliation/ Korea)***
	C4. Microelectronics & Packaging Materials 2	**D4. Interconnection**
15:55-16:20	O2-6 **Face and Phase Engineered TiO2 and MoS2 Nanocomposites Toward Efficient Photocatalytic H2 Evolution and its Potential as a Nydrogen Sensor** Prof. Hyuksu Han (Konkuk University/ Korea)	O2-7 **O1-6 Bonding with Partially Cured Low Temperature Polyimide** Ms. Pin-Syuan He, Mr. Kai-Cheng Shie, Prof. Chih Chen (National Yang Ming Chiao Tung University/ Taiwan)
16:20-16:45	O2-8 **Multiscale Model to Predict Fatigue Crack Propagation Behavior of Epoxy Nanocomposites** Prof. Hyunseong Shin, Mr. Haolin Wang (Inha University/ Korea)	O2-9 **Development of Simultaneous Transfer and Bonding (SITRAB) process for Micro/Mini LED arrays using Anisotropic SITRAB Paste (ASP) and Laser-Assisted Bonding (LAB) Technology** Dr. Jiho Joo, Dr. Yong-Sung Eom, Ms. Chanmi Lee, Dr. Gwang-Mun Choi, Mr. Ki-seok Jang, Mr. In-Seok Kye, Dr. Seok Hwan Moon, Dr. Ho-Gyeong Yun, Dr. Kwang-Seong Choi (ETRI/ Korea)
16:45-17:10	O2-10 **Thermal Stress Analysis of Warpage Behavior according to Application of Thermal Insulation Materials** Mr. Kyeong-ho Shin, Mr. Sanglok Park, Ms. HyeonJung Kwon, Mr. Hyoungsub Shim, Prof. Joo-Hyung Kim (Inha University/ Korea)	O2-11 **Analysis of Ar/N2 Two-step Plasma Activated Cu Surface for Low-Temperature Cu–Cu Direct Bonding Characteristics** Mr. Seonghun Choi, Ms. Gahui Kim, Prof. Sarah Eunkyung Kim*, Prof. Young-Bae Park (Seoul National University of Science and Technology*, Andong National University/ Korea)
17:10-17:35	O2-12 **Robust and Flexible Bonding of Carbon Nanotube Adhesion Layer between Polymer Substrates via Microwave Irradiation** Ms. Minjeong Sohn, Dr. Min-Su Kim, Prof. Byeong-Kwon Ju*, Dr. Tae-Ik Lee (Korea University*, KITECH/ Korea)	O2-13 **High Speed and Low-Pressure Sinter-Bonding Properties of Surface-Treated Bimodal Cu Particles for Die-Attachment** Mr. Doyeop Namgoong, Prof. Jonh-Hyun Lee (Seoul National University of Science and Technology/ Korea)
17:35-18:00	O2-14 **Using MooN IEC 61508 Functional Safety Architecture in Throughput Logic Critical Designs: a Case of Study** Ms. Bruna Fernandes Flesch, Dr. Rodrigo Marques de Figueiredo, Dr. Lúcio Rene Prade (UNISINOS/ Brazil)	O2-15 **Optimization of Cu Interconnects - SiCN Interfacial Adhesion by Surface Treatments** Mr. Dong Jun Kim*, Dr. Sumin Kang*, Mr. Sun Woo Lee*, Dr. Inhwa Lee, Dr. Seungju Park, Dr. Jun Soo Lee, Dr. Jihyun Lee, Dr. Joong Jung Kim, Prof. Teak-Soo Kim (Samsung Electronics, KAIST*/ Korea)
18:00-18:20	**Award Ceremony, Lucky Draw and Closing Remark (Room Monterosso, B1F)**	

※ ***General Meeting***: Nov.4, 2021 (Thur.) PM5:40, Room Monterosso (B1F)

Poster Presenttion: Nov. 4, 2021 (Thu.) 2:40~3:20 P.M.

Room Forum 2, 3F

Session Chair: Name (Affiliation/ Korea)

No	Topic	Author	Affilliation	Country	Paper Title
P1-01	Microelectronics & Packaging Materials	MiKyeong Choi*,**, DongSu Ryu*, DongJoo Park*, JinYoung Khim*, SeungBoo Jung†**	Amkor technology korea*, Sungkyunkwan University**	kr	Advanced Thermal Interfacial Material with High Thermal Conductivity for Thermal Packaging Challenges
P1-02		Yongchan Kwon, Jung Won Kim, Tae Hoon Kim, Seong Won Seo, Jung-Rae Park, Cheong-Ha Jung, Gu-Sung Kim†	Kangnam University	kr	A Study on the Major Characteristic Factors of Oxide Dielectric
P1-03		Seong-Gyu Ko, Nakyung Oh, Chan-Ho Jeon, Sang-Gyu Choi, Hyeon-Woo Son, Sang-Wook Kim, Soong-Keun Hyun†	Inha University	kr	Characterization of joining properties of Ni-coated Cu/MnSi joint brazed by Ag-Cu-Zn-Sn filler metal
P1-04		Eun Ha, Haksan Jeong, Seungboo Jung†	Sungkyunkwan University	kr	Effect of EMI Shielding Fillers in EMC on RF Characterization in Range of 18GHz for Fan-out Package Structure
P1-05		Alexsandro Bobsin, Tayná Copes Rodrigues, Paola Lamberty, Iara Fernandes, Sandro Binsfeld Ferreira, Celso Peter, William Dutra, Willyan Hasenkamp†*, Carlos Alberto Mendes Moraes	Universidade do Vale do Rio dos Sinos (UNISINOS), HT Micron*	br	Conductive films produced by Ag and core-shell (cu@Ag) inks for electromagnetic shielding in accordance with ASTM D4935
P1-06		Alexsandro Bobsin†, Iara Fernandes, Tayná Copes Rodrigues, Paola Lamberty, William Dutra, Sandro Binsfeld Ferreira, Celso Peter, Willyan Hasenkamp*, Carlos Alberto Mendes Moraes	Universidade do Vale do Rio dos Sinos (UNISINOS), HT Micron*	br	Application of silver nanoparticle inks for the production of films in conformal shielding on SiP
P1-07		Jun-Ho Jang, Haksan Jeong, Dong-Gil Kang, Kyung Deuk Min, Ji-Won Baek, Seong-Boo Jung †	Sungkyunkwan university	kr	Drop properties of wafer level package modules with various underfill materials
P1-08		DongGil Kang, HakSan Jung, KyungDeuk Min, JunHo Jang, Eun Ha, JiWon Baek*, SeungBoo Jung†	Sungkyunkwan University, Wonchemical*	kr	Evaluation of bending characteristics of WLP module with three types of underfill
P1-09		Jiyong Yim, Rino Choi†, Daewoong Kwon	Inha University	kr	HfZrO2 Based Ferroelectric-gated IGZO Thin Film Transistor Memory
P1-10		Jeong-han Kim, Rino Choi†, Daewoong Kwon	Inha University	kr	HfZrO2 Ferroelectric Tunneling Junction with IGZO Insertion for Unidirectional Self-rectifying Characteristics
P1-11		Jinshu Li, Qi Zhang†, Euy Heon Hwang	Sungkyunkwan University	kr	Hot electron relaxation in MoS2 and WSe2 field-effect transistors
P1-12		Shuo Ni, Jihyun Kim, Joo-Hyung Kim†	Inha University	kr	Investigation of photovoltaic devices monitoring technologies
P1-13		Hyo Eun Kim, Jun Seong Ji, Ye Ji Kim, Han Gyoel Jeon, Eun Sol Jo, Gu Sung Kim†	Kangnam University	kr	A Study on the Electrical Characteristic by Interposer Materials
P1-14		Harshada Satish Patil, Deok-kee Kim†	Sejong University	in	Inorganic Protection layer for Stable Resistive Switching of Organic Bulk Heterojunction
P1-15	Packaging Processing & Equipment	Deokjin Seo, Ryu Jongin†	Korea Electronics Technology Institute	kr	Implementation of Magneto-Electric Dipole Antenna with Dual Polarization Using LTCC Process
P1-16		Jong-Min Yook†, Hyun Je Chang, Jiyeon Park, Dongsu Kim Kim	Korea Electronics Technology Institute	kr	Through-hole Silicon Capacitor for 3D-IC Package
P1-17		Jae Woo Song, Sun Kook Kim, Se Hoon Park†	Korea Electronics Technology Institute	kr	Driver Amplifier module with face up fan-out packaging structure using thermosetting low loss material applicable to mmWave
P1-18		Dong Hyeok Bae, Se-Hoon Park†	Korea Electronics Technology Institute	kr	Optimization of Plasma treatment system for Fan-Out Semiconductor Packaging
P1-19		HyeokJin Chu, Sungdong Kim†	Seoul National University of Science and Technology	kr	Implementation of Multi-RDL Layers Using Polymeric ILD for FOWLP
P1-20		Jein Yu†, Dongsu Kim, Jong-Min Yook	Korea Electronics Technology Institute	kr	Substrate-embedded Ferrite Core Inductorusing Photosensitive Glass Substrate for Integrated Voltage Regulators
P1-21		Ju Seung Lee, Tae-il Kim†	Sungkyunkwan University	kr	Nanoscale Dewetting Based Direct Interconnnection System for Assembly of Microscale Electronics
P1-22		Mingyu Kim, Rino Choi†	Inha university	kr	High precision hybrid bonding alignment system with visible laser
P1-23	Flexible, Wearable, & Printed Electronics	Xuan Luc Le, Duc Thinh Vuong, Sung-Hoon Choa†	Seoul National University of Science and Technology	kr	Improvement of Reliability and Flexibility for Flexible Solar Cell with Filled Structure and Optical Adhesive
P1-24		Hyun Jin Nam, Se-Hoon Park†	Korea Electronics Technology Institute	kr	Development and Characteristics of Multipurpose Transparent Polyurethane Film
P1-25		Hyun Jin Nam, Wal young Kim*, Na Young Seo*, Su-Yong Nam*, Se-Hoon Park†	Korea Electronics Technology Institute, Pukyong National University*	kr	Development of stretchable electrodes for wearables using vacuum thermal pressure
P1-26		Chanho Jeong, Tae-il Kim†	Sungkyunkwan University	kr	Spatial Independent Zone for Dynamic Noise Unaffected 2D Sensors
P1-27		Jehoon Lee, Jongkyu Won, Jungwon Kang†	Dankook University	kr	Characteristics of The Colorless Polyimide-Based Flexible X-ray Detector with Non-Fullerene Polymer
P1-28		Young Jin Jo, Tae-il Kim†	Sungkyunkwan University	kr	Organic transistors based on biocompatible and biodegradable solid-state electrolyte
P1-29		Jiyoon Youm, Seung-Hwan Lee, Inhee Cho, Da-Woon Jeong, Hyung-Ho Park*, Min-Su Kim†	Korea Institute of Industrial Technology, Yonsei University*	kr	Optimization of carbon solution for fabrication of conductive cellulose nanofiber column of electrokinetic power generator
P1-30		Kalyani Dhondiram Kadam, Deok-kee Kim†	Sejong University	in	Modification in Electron Transport Layer for Efficient Flexible Organic Solar Cells
P1-31		Seunghyun Oh†	Seoul National University	kr	Nanofiber Channel Organic Electrochemical Transistors for Low-Power Neuromorphic Computing and Wide-Bandwidth Sensing Platforms

P1-32		Gyeongyeong Cheon, Jahyeon Kim, Byeongjin Ahn, Min-Su Kim, Junghwan Bang, Young-Bae Park, Yong-Ho Ko†	Korea Institute of Industrial Technology	kr	Bonding Properties of a Low-temperature Solder on Polymer-based Substrates by Laser Bonding Processes
P1-33		Byungwoo Kim†	Chosun University	kr	A Study on the Reaction between Liquid Ga and Pd Substrate for the Application of Flexible Electronic Devices
P1-34		Hyeokgi Choi†	Chosun university	kr	A Study on the Reaction between Liquid Ga and Au Substrate for the Application of Flexible Electronic Devices
P1-35	Sensors, LED, & MEMS/NEMS Packaging Technology	In-Seok Kye, Yong-Sung Eom†, Jiho Joo, Gwang-Mun Choi, Ki-Seok Jang, Chanmi Lee, Yong-Jun Oh, Kwang-Seong Choi	Electronics and Telecommunications Research Institute	kr	Microstructure analysis of Mini LED bonding joint transferred and bonded using the Simultaneous Transfer and Bonding (SITRAB) process
P1-36		Injoo Kim, Sungdong Kim†	Seoul University of Science and Technology	kr	Development of a Vacuum device for Micro LED Transfer
P1-37		Md Kamal Hossain†	Bangladesh Council of Scientific and Industrial Research	bd	Synthesis of crystalline pure mesoporous TiO2B and its application on environmental pollutants degradation
P1-38		Ko DeaHyeon, Kim Minju, So Younghee, Sungwook Mhin†	Kyonggi University	kr	One step solid state reaction of (Ni,Co,Mn)O4 pellet as negative temperature coefficient sensor
P1-39		Myounghun Kim, Kwang-Seok Kim†	Korea Institute of Industrial Technology	kr	Fabrication of Cu-Graphite Composite Sheets for Electromagnetic Wave Shielding and Heat Dissipation Using Direct Coating and Atmospheric-Pressure Plasma Annealing
P1-40		Doa Kim, Doo in Kim, Myung Yung Jeong†	Pusan National University	kr	Hardness Enhancement on Superhydrophobic Surface for Electronic Packaging
P1-41		Bong-Gyu Bae, Hyewon Park, Young-Jun Lee†, Joo-Hyung Kim	Inha University	kr	Performance Comparison of SAW Sensor by Coating Methods for the Detection of Chemical Warfare Agent Simulants
P1-42		Kwanyong Lee, Jehoon Lee, Mr. Daeho Han, Jungwon Kang†	Dankook Univ.	kr	A Study of Improving the Sensitivity of Indirect X-ray Detectors by Adding Hybrid Perovskite Quantum Dots
P1-43		Xuan Luc Le, Duc Thinh Vuong, Sung-Hoon Choa†	Seoul National University of Science and Technology	kr	Lifespan prediction and durability of MEMS vertical probe using various interconnection structures
P1-44		Duc Thinh Vuong, Xuan Luc Le, Sung-Hoon Choa†	Seoul National University of Science and Technology	kr	Modelling of Peeling Process of Adhesive Tape for Electromagnetic Interference Shielding
P1-45		YeongJun Park, Kwangsik Oh, Seungmin Park, YoonHo Kim, Sarrah Eun Kyung Kim†	Seoul National University of Science and Technology	kr	Highly Selective Cu Etching in Cu/Ni Layer Structures for Probe Pin Fabrication
P1-46		Jong Uk Kim, Seok Joon Kwon, Tae-il Kim†	Sungkyunkwan University	kr	Broadband Light Absorber with Hierarchical Nanoturf structures for Solar-Thermal Applications

Room Forum 3, 3F

Session Chair: Name (Affiliation/ Korea)

No	Topic	Author	Affilliation	Country	Paper Title
P2-01	Interconnection	Lee Wan Geun†	Seoul National University of Science and Technology	kr	Formation of Nano-Porous Structured Cu by Selective Corrosion of Brass Alloy and Sinter Bonding for Cu-Cu Direct Bonding
P2-02		Jia-Juen Ong, Kai-Cheng Shie, Chih Chen†	National Yang Ming Chiao Tung University	tw	Microstructure analysis and thermal fatigue enhancement in Cu-Cu joints
P2-03		YoonHo Kim, SeungMin Park, Sarrah Eunkyung Kim†	Seoul National University of Science and Technology	kr	Low teperature Cu-Cu bonding using Ag nanolayer
P2-04		Seungmin Park, YoonHo Kim, YeongJun Park, Sarrah Eunkyung Kim†	Seoul National University of Science and Technology	kr	Characteristics of Ti Nano Passivation for Low Temperature Cu Bonding
P2-05		Hung-Che Liu, Chih Chen†	National Yang Ming Chiao Tung University	tw	Voids Evolution in Cu-Cu Joints
P2-06		Jung Jaewoong, Ryu Jongin†	Korea Electronics Technology Institute	kr	Analysis and Comparison about Dielectric and Plating Conditions
P2-07		Haneul Han, Jinhyun Lee, Bongyoung Yoo†	Hanyang university	kr	A study on the electrodeposition of copper at low temperature and its application
P2-08		Sung Min Jeon, Sang-Yeob Kim, Su-Hun lee, Hyun-Jun Park, , Bae-yun Ah, Mong-hyun Cho, Jeong-Tak Moon†	MK Electron co., Ltd	kr	A study on Au coated high-purity Silver-core wire with low resistivity bonded possible in the atmosphere
P2-09		SukYoun Lee, JeongTak Moon†, MongHyun Cho, GyuMin Sim, HyunJun Park	MK Electron co., Ltd	kr	New Metal Coated Cu Bonding Wire for Semiconductor Packaging
P2-10		Byeongjin Ahn, Jahyeon Kim, Gyeong-Yeong Cheon, Jungsoo Kim, Chang-Woo Lee, Young-Bae Park*, Yong-Ho Ko†	Korea Institute of Industrial Technology, Andong National University*	kr	Joint Reliabilities of Al Wire Bonding on Cu(OSP) and ENIG Surface-finished Substrate under Complexed Stress with Current and Temperature
P2-11		Woobin Kwon, Youn-Hye Kim†*, Yohei Kotsugi*,**, Kirak Son***, Soo-Hyun Kim*, Young-Bae Park	Andong National University, Yeungnam University*, Tanaka precious metals**, Electronics and Telecommunications Research Institue***	kr	Interfacial Adhesion Energy of TiN Diffusion Barriers Prepared by Atomic Layer Deposition for Ru Interconnect
P2-12		Yoon Hwan Moon*, Yong Sung Eom†, Jiho Joo, Gwang Mun Choi, Ki seok Jang, In Seok Kye, Chanmi Lee, Yong Jun Oh*, Kwang Seong Choi	Hanbat National University*, Electronics and Telecommunications Research Institute	kr	Analysis of bonding structure of flexible devices using Anisotropic Solder Paste (ASP) and Laser-Assisted Bonding (LAB) Technology
P2-13		Ki-Seok Jang, Yong-Sung Eom†, Gwang-Mun Choi, Kook-Man Kim*, Jeong-Soo Lee*, Jiho Joo, Chan-Mi Lee, Ho-Gyeong Yun, In-Seok Kye, Bong-Sun Yoo*, Kwang-Seong Choi	Electronics and Telecommunications Research Institute, BNF Corporation*	kr	Laser Assisted Bonding Process Using with Anistropic Solder Paste(ASP) for Fine-Pitch interconnection
P2-14		Duc Thinh Vuong, Xuan Luc Le, Sung-Hoon Choa†	Seoul National University of Science and Technology	kr	Fatigue life Prediction for Solder joint of Flip-chip in Laser bonding process by Numerical analysis
P2-15		Dong Hwan Lee, Min Seong Jeong, Jeong Won Yoon†	Chungbuk National University	kr	Comparative study of laser and reflow soldered Sn-3.0Ag-0.5Cu/OSP joints

P2-16		Kyung-Yeol Kim, Eun Ha, Kyung Deuk Min, Haksan Jeong, Seung-Boo Jung†	Sungkyunkwan University	kr	The transient liquid phase bonding by ultrasonic-assisted soldering of Cu contained Sn-58Bi solder paste for high-temperature packaging applications
P2-17		Chen Shiqi†, Gan Guisheng	Chongqing University of Technology	cn	Effect of rapid thermal shock cycle on the thermomechanical reliability of Sn-90Pb solder bumps
P2-18	PCB, Solder, & Assembly Process	Jahyeon Kim, Nayoung We, Byeongjin An, Gyeongyeong Cheon, Dongyurl Yu, Sehoon Yoo, Young-Bae Park*, Yong-Ho Ko†	Korea Institute of Industrial Technology, Andong National University*	kr	Evaluations on Interfacial Reactions and Mechanical Properties of Hybrid Solder Joints with Low-temperature and Mid-temperature Pb-free Solders
P2-19		Hoekyung Kim†, Young-Min Im	Korea Electronics Technology Institute	kr	A Fixed Folding Test Method for Measuring Durability of Flexible Opto-Electric Circuit Cables
P2-20		Junho Lee, Kyu-bong Jang*, Sihyun Lee, Seoah Kim, Sungwook Mhin†	Kyonggi University, Inha University*	kr	The effect of MgO and sintering temperature on mechanical properties of MgO-ZrO2-TiC composite
P2-21		Minjeong Sohn, Byeongjin Ahn, Yong-Ho Ko, Byeong-Kwon Ju, Tae-Ik Lee†	Korea Institute of Industrial Technology	kr	Evaluating Thermal Deformation of Solder Joint in Electronic Packages
P2-22		SoYeon Jun, Junhyuk Yu, HyeonJoo Yoo, Sehoon Yoo†	Korea Institute of Industrial Technology	kr	Solderability of Water-Soluble Sn-3.0Ag-0.5Cu Solder Paste with Molecular Weight of Solvent
P2-23		Tae-Young Lee So-Yeon Jun, Young-Ho Kim, Sehoon Yoo†	Korea Institute of Industrial Technology	kr	Novel Nickel-free Electroless Palladium Immersion Gold (EPIG) Surface Finish for Fine Pitch Flip Chip Interconnects
P2-24		Yun-Chan Kim, Junghwan Bang†	Korea Institute of Industrial Technology	kr	The Study on Properties of Sintered Joint Using Silver Paste for High-temperature Operation
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P2-26		Nakyung Oh, Seong-Gyu Ko, Hyeon-Woo Son, Sang-Wook Kim, Soong-Keun Hyun†	Inha University	kr	Evaluation of the bonding properties of Bi-Te thermoelectric element and porous Cu electrode using SAC305 solder
P2-27		Sri Harini Rajendran, Do Hoon Cho, Seong Min Seo, Jae Pil Jung†	University of seoul	in	Adapting nanocomposite micro-solder ball process to next-gen advanced packaging
P2-28		Jaeyeol Son,Seulgi Lee*, Youngwoo Lee*, Haksan Jeong, SeungBoo Jung†	Sungkyunkwan University, MK Electron Co.,Ltd.*	kr	Study of solder composition for High TC reliability as optimized Ag and Bi contents for advanced BGA PKG with Cu-OSP pad finish.
P2-29		Seo-Hyang LEE, Yong-Suk KIM, Jae-Ho LEE†	Hongik University	kr	Electrochemical Evaluation of PCB Copper Etchant to Reduce Undercut Etching
P2-30		Haksan Jeong, Kyung-Yeol Kim, Kyung Deuk Min, Seung-Boo Jung†	Sungkyunkwan University	kr	Mechanical Reliability of Cu Core Solder Joints after Electromigration
P2-31		MinSeong Jeong, DongHwan Lee, HyeonTae Kim, YoungJin Seo, MinHaeng Heo, JeongWon Yoon†	Chungbuk National University	kr	Mechanical behavior and shear property of Lead-free solder joints at elevated temperatures
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